AMENDMENTS TO THE SPECIFICATION:

Please insert the following header and paragraph on page 1 after the title:

RELATED APPLICATIONS

The present application is based on International Application No. PCT/IL2004/000730 filed August 5, 2004 , and claims priority from, US Provisional Application Number 60/492,742, filed August 6, 2003, the disclosure of which is hereby incorporated by reference herein in its entirety.

Please replace the paragraphs on page 9, lines 28 to page 10, line 8:

Fig. 9 depicts the results of using a symmetric second order signal, wherein four servo mark sequences are recorded in two pairs of opposite track offsets +X, +Y, -X and –Y (|Y|>|X|), respectively. Thus, the servo offsets include servo offsets of two different magnitudes and any variations in the fixed offset between the read and write spots is corrected by a track error signal of the form:

$$\frac{\dfrac{A\cdot(B\cdot S1-S2)+C\cdot(D\cdot S3+S4)}{I\cdot\left(E\cdot(S1+F\cdot S2)+G\cdot(S3+H\cdot S4)\right)}}{\dfrac{A\cdot(B\cdot S1-S2)+C\cdot(D\cdot S3-S4)}{I\cdot\left(E\cdot(S1+F\cdot S2)+G(S1+H\cdot S2)\right)}}$$

where:

S1, S2, S3 and S4 are the respective signal amplitudes of the four offset mark sequences;

A, B, C and D are symmetry breaking factors; and

$I\cdot\left(E\cdot(S1+F\cdot S2)+G\cdot(S3+H\cdot S4)\right)$ is a general normalization factor.

Please replace the paragraphs on page 23, lines 29 to page 24, line 8:

Fig. 9 is a graphical representation showing a tracking error signal as a function of deviation from a nominal track center, characteristic of different formatting and tracking systems. The first S-curve 901 (dashed blue line) is calculated for a pair of sampled servo mark sequences that are evenly offset to the nominal track. The S-curve represents the symmetric difference S1 – S2. The second S-curve is calculated using a second order formula of the form:

$$\frac{\dfrac{A\cdot(B\cdot S1-S2)+C\cdot(D\cdot S3+S4)}{I\cdot\left(E\cdot(S1+F\cdot S2)+G\cdot(S3+H\cdot S4)\right)}}{\dfrac{A\cdot(B\cdot S1-S2)+C\cdot(D\cdot S3-S4)}{I\cdot\left(E\cdot(S1+F\cdot S2)+G(S1+H\cdot S2)\right)}}$$

where:

S1, S2, S3 and S4 are the respective signal amplitudes of the four offset mark sequences;

A, B, C and D are symmetry breaking factors; and

$\underline{I\cdot\left(E\cdot(S1+F\cdot S2)+G\cdot(S3+H\cdot S4)\right)}$ is a general normalization factor.

Please replace the paragraphs on page 25, lines 6 to 9:

Fig. 12 illustrates pictorially the use of oriented marks for the navigation of the spot in the radial direction. A specific embodiment of a manipulation that creates a tilted mark is the addition of a liquid crystal panel that blocks approximately two thirds of one half of the clear aperture of the optical unit.